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Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In re

Amendment of Part 74 of the Commission's Rules  
Governing Use of the Frequencies in the Instructional  
Television Fixed Service

)  
)  
) MM Docket No. 93-106  
)  
)

**REPLY COMMENTS OF  
THE WIRELESS CABLE ASSOCIATION INTERNATIONAL, INC.**

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## EXECUTIVE SUMMARY

WCA, NIA and the ITFS Parties have agreed to an industry-wide compromise that accommodates the need of educators and wireless cable operators to maximize the number of channels devoted to full time commercial or educational use, while assuring the ability of ITFS licensees to simultaneously transmit multiple programs. This compromise contemplates that the Commission will permit channel loading and system-wide scheduling pending the technical and economic viability of digital compression technology on the following basis:

- Each ITFS licensee will be required to preserve for immediate use or ready recapture at least forty hours per week per licensed channel for the transmission of ITFS programming (including the right to recapture simultaneous use of airtime on the number of the channels for which it is licensed). These rights cannot be abridged by contract and any contracts that do so are superseded. There will be no reduction whatsoever in the amount of mandatory ITFS programming from the current rules.
- Each ITFS licensee will be required to actually transmit at least twenty hours (twelve hours for the first two years of operation) of ITFS programming each week for each channel licensed to it. Each ITFS licensee will be permitted to load programming satisfying this requirement on less than all of the channels for which it is licensed. The minimum programming requirement (*i.e.* hours 1-20) must be met by transmissions on the channel(s) licensed to the ITFS licensee.
- In order to promote realization of the benefits of system-wide planning of program schedules, ITFS licensees that choose to do so may agree to the transmission over any MDS or ITFS channel in the system programming satisfying the minimum recapture requirements (*i.e.* hours 21-40). By carefully coordinating their programming schedules as part of a system, the ITFS licensees in an area could create full time educational channels and provide their wireless cable partner with the maximum number of full time commercial programming channels (thus obviating the need for channel mapping technology), while still preserving the ability of the ITFS licensees to transmit multiple programs simultaneously.
- Leasing and scheduling by ITFS applicants/licensees consistent with the above will establish that the applicant/licensee needs its channel capacity and entitle the applicant/licensee to an initial or renewed license. No demerit for channel loading or system-wide scheduling will be imposed under the Commission's system for selecting from among mutually-exclusive applicants, nor will channel loading or system-wide scheduling have adverse consequences for a renewal application.
- Similarly, leasing and scheduling by ITFS applicants/licensees consistent with the above will not serve as a basis for future efforts to seek reallocation of non-loaded ITFS spectrum for commercial use, and the parties to the compromise agree not to seek any such reallocation.

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**REPLY COMMENTS OF  
THE WIRELESS CABLE ASSOCIATION INTERNATIONAL, INC.**

The Wireless Cable Association International, Inc. ("WCA"), by its attorneys, hereby submits its reply to the comments filed in response to the *Notice of Proposed Rulemaking* ("NPRM")<sup>1/</sup> in the captioned proceeding.

With these reply comments, WCA is presenting for the Commission's consideration an industry-wide compromise proposal for implementing channel loading that has been agreed to by WCA, the National ITFS Association ("NIA"), and American Council on Education, American Association of Community Colleges, Alliance for Higher Education, Arizona Board of Regents for Benefit of the University of Arizona, Board of Regents of the University of Wisconsin System, Iowa Public Broadcasting Board, Regents of the University of New Mexico, Board of Education of the City of Albuquerque, South Carolina Educational Television Commission, State of Wisconsin - Educational Communications Board, and the

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<sup>1/</sup> *Amendment of Part 74 of the Commission's Rules Governing Use of the Frequencies in the Instructional Television Fixed Service*, 8 FCC Rcd 2828 (1993)[hereinafter cited as "NPRM"].

University of Maine System (collectively, the "ITFS Parties"). The text of that compromise is set forth in full as Exhibit A.<sup>2/</sup>

**I. The Comments Submitted By Those Engaged In The Leasing Of Excess ITFS Capacity Support The Channel Loading Concept.**

In the *NPRM*, the Commission proposed to amend Sections 74.931(a) and 74.931(e)(2) on an interim basis to permit an Instructional Television Fixed Service ("ITFS") licensee to satisfy its minimum formal educational programming and ITFS programming obligations by transmitting such programming on a weekly average of twenty hours for each channel licensed, regardless of the specific channel or channels over which that required programming is transmitted. In its initial comments, WCA strongly supported the

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<sup>2/</sup> Several proposals have been advanced in initial comments that go beyond the scope of the *NPRM* and were not the subject of discussion between the parties to this compromise and that WCA submits should not be considered at this time. For example, in its comments, NIA has requested that the Commission adopt rules addressing the ITFS licensee's right to channel capacity once digital compression is implemented. *See* Comments of Nat'l ITFS Ass'n, MM Docket No. 93-106, at 6 (filed June 14, 1993)[hereinafter cited as "NIA Comments"]. WCA takes no position on the specific proposal advanced by NIA since the *NPRM* expressly provides that rule changes in contemplation of digital compression are beyond the scope of this proceeding. *See NPRM*, 8 FCC Rcd at 2833 n. 13.

Similarly, NIA has called for the Commission to promulgate standard clauses that would have to be included in any excess capacity lease. *See* NIA Comments, at 4-5. However, no specific clauses have been proposed, rendering it impossible for WCA to provide meaningful comment. Because NIA's proposal is beyond the scope of the *NPRM*, WCA believes it is best left for consideration another day. WCA's preliminary view, however, is that standard clauses will only further restrict the flexibility of ITFS licensees and wireless cable operators to craft partnerships that best meet local needs. Since the staff of the Distribution Services Branch carefully scrutinizes all ITFS excess capacity leases as part of the application process and consistently requires the modification of leases that do not comport with either the Commission's rules or informal, unwritten policies adopted by the staff to protect ITFS interests, it is difficult to imagine that mandating standard contractual clauses will provide any meaningful difference.

Commission's proposal, demonstrating that permitting ITFS licensees to engage in channel loading will meet the needs of educators, students, programmers, wireless cable system operators and the public until digital compression technology can be implemented to alleviate the current channel shortage facing wireless cable operators.<sup>3/</sup> WCA was hardly alone in its support of the *NPRM* -- the concept of channel loading was supported by a wide variety of educational interests,<sup>4/</sup> as well as representatives of the wireless cable industry.<sup>5/</sup>

The support that the wireless cable industry evidenced for channel loading speaks for itself -- it confirms that the *NPRM* was correct in concluding that while wireless

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<sup>3/</sup> Comments of Wireless Cable Ass'n Int'l, MM Docket No. 93-106, at 2-10 (filed June 14, 1993)[hereinafter cited as "WCA Comments"].

<sup>4/</sup> See Joint Comments of ITFS Parties, MM Docket No. 93-106, at 2-5 (filed June 14, 1993)[hereinafter cited as "ITFS Parties' Comments"]; Joint Comments of Cross Country Wireless Cable I, L.P., California State Polytechnic University at Pomona, San Bernardino Community College District, the Diocese of San Bernardino Education and Welfare Corp and the Regents of the University of California, MM Docket No. 93-106 (filed June 14, 1993)[hereinafter cited as "Box Springs Comments"]; Comments of the Regents of the University of California, MM Docket No. 93-106 (filed June 14, 1993)[hereinafter cited as "UC Comments"]; Comments of the University of Colorado at Boulder, MM Docket No. 93-106 (filed June 14, 1993)[hereinafter cited as "Colorado Comments"]; Comments of Clarendon Foundation, MM Docket No. 93-106 (filed June 14, 1993); Comments of Parkland College, MM Docket No. 93-106 (filed June 14, 1993)[hereinafter cited as "Parkland College Comments"]; Comments of the Board of Education of the Township of Union, MM Docket No. 93-106, at 10 (filed June 14, 1993)

<sup>5/</sup> See Comments of WJB-TV Limited Partnership, MM Docket No. 93-106 (filed June 14, 1993)[hereinafter cited as "WJB Comments"]; Comments of the Rural Wireless Cable Group, MM Docket No. 93-106 (filed June 14, 1993)[hereinafter cited as "Rural Comments"]; Comments of Besozzi, Gavin & Craven, MM Docket No. 93-106 (filed June 14, 1993)[hereinafter cited as "BG&C Comments"]; Comments of Transworld Telecommunications, Inc., MM Docket No. 93-106 (filed June 14, 1993)[hereinafter cited as "TTI Comments"]; Comments of the Coalition of Concerned Wireless Cable Operators, MM Docket No. 93-106 (filed June 14, 1993)[hereinafter cited as "Coalition Comments"].

cable operators require full time commercial channels, channel mapping is an unduly expensive means towards that end.<sup>6/</sup>

The support that educators have expressed for channel loading is equally telling.<sup>7/</sup> As the *NPRM* recognized, educators would prefer to consolidate their programming onto as few channels as possible to minimize the interspersing of commercial and educational programming with its attendant risk that students will accidentally view inappropriate commercial programming before or after scheduled educational programming.<sup>8/</sup> While channel mapping accomplishes that goal, those educators that engage in the leasing of excess ITFS capacity have recognized that channel mapping is not a panacea.

The record elicited in response to the *NPRM* evidences that channel mapping technology is less than optimal for educators. It has been termed by a group of educators currently using channel mapping technology as "a young technology requiring frequent adjustment to allow stereo and mono transmission on the same channel and to allow smooth transition when scrambled channels are switched."<sup>9/</sup> One educator supported channel loading

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<sup>6/</sup> See WCA Comments, at 5-7; Coalition Comments, at 2-4; BG&C Comments, at 2-3; Rural Comments, at 2.

<sup>7/</sup> Of course, not all of the educators filing in response to the *NPRM* endorsed the concept of channel loading. However, by and large those objecting to the concept are not engaged in the leasing of excess capacity to wireless cable. As a result, they have no experience with the real world problems associated with attempting to use channel mapping as a mechanism for segregating educational and commercial programming transmitted over a single system.

<sup>8/</sup> See *NPRM*, 8 FCC Rcd at 2831.

<sup>9/</sup> Box Springs Comments, at 5. See also UC Comments, at 2.

as an alternative to channel mapping because “a system using channel mapping is prone to equipment breakdowns, operator errors, and mistakes due to miscommunication between the separate parties who may schedule and operate the system.”<sup>10/</sup> The costs associated with installing channel mapping equipment at each television set at each ITFS receive site have also prompted objections to channel mapping.<sup>11/</sup> And, as one educator noted, channel mapping “create(s) an economic burden for wireless cable operators which can only serve to inhibit the growth of ITFS services generally.”<sup>12/</sup>

While the concept of channel loading drew support from both the commercial and educational camps, there was a divergence of opinion in the initial comments regarding the minimum recapture rights that an ITFS licensee should be required to maintain with respect to its channels. On one hand, WCA and other wireless cable interests established that requiring ready recapture of time on every ITFS channel would undercut the economic benefits of channel loading by forcing wireless cable operators to install expensive channel mapping equipment at every television set at every receive site.<sup>13/</sup> As one wireless cable operator put it:

[Requiring ready recapture of all ITFS channels] allows the ITFS licensee to hold a gun to the wireless operator’s head. The Commission cannot expect any wireless operator to purchase

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<sup>10/</sup> Parkland College Comments, at 3-4.

<sup>11/</sup> Box Springs Comments, at 8-9.

<sup>12/</sup> Parkland College Comments, at 3.

<sup>13/</sup> See WCA Comments, at 10-12; WJB Comments, at 5-6.



equipment, advertise programming availability, beef up installation capacity, and charge reasonable rates to subscribers, when the ITFS licensee can reduce the channel capacity, create customer churn, and waste the investment in customer installations and ITFS transmitters by exercising such “Commission mandated” recapture rights.<sup>14/</sup>

On the other hand, while some educators proposed that an ITFS licensee be permitted to meet its recapture requirement utilizing any channel in the system,<sup>15/</sup> others expressed a variety of related concerns regarding the “need” of a licensee for ITFS channels that it could not even recapture, and called for the Commission to mandate that each ITFS licensee retain the ability to recapture some time on each of its ITFS channels.<sup>16/</sup> To address these concerns, WCA convened a series of meetings with representatives of NIA, the ITFS Parties and others in what proved to be a successful effort to reach an accommodation.<sup>17/</sup>

**II. The Industry-Wide Compromise Accommodates The Need Of Educators and Wireless Cable Operators To Maximize The Number Of Channels Devoted To Full Time Commercial Or Educational Use, While Assuring The Ability Of ITFS Licensees To Simultaneously Transmit Multiple Programs.**

The compromise struck by WCA, NIA, and the ITFS Parties addresses the tension between the need of educators and wireless cable operators to maximize the number

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<sup>14/</sup> TTI Comments, at 10.

<sup>15/</sup> See UC Comments, at 2-3; Box Springs Comments, at 6-7.

<sup>16/</sup> See Colorado Comments, at 1; ITFS Parties’ Comments, at 5-6; NIA Comments, at 3.

<sup>17/</sup> WCA applauds the Commission for extending the filing deadline for reply comments in this proceeding by three weeks to permit these negotiations to take place. Absent that extension, it is uncertain whether the industry-wide compromise being presented today could have been achieved.

of full time educational and commercial channels, and the desire of the educational community to assure that ITFS licensees have simultaneous access to multiple channels. It does so by acknowledging that each channel is operated as part of a larger transmission system and promoting the system-wide scheduling of educational and commercial programming.

Under the terms of the compromise, each ITFS licensee engaged in channel loading will still be required to preserve for immediate use or ready recapture at least forty hours per week per licensed channel for the transmission of ITFS programming. In addition, the compromise calls for the Commission to mandate that each ITFS licensee engaged in channel loading maintain the right to use or recapture some simultaneous use of airtime on the number of the channels for which it is licensed.<sup>18/</sup>

The compromise contemplates that each ITFS licensee engaged in channel loading still will be required to actually transmit at least twenty hours (twelve hours for the first two years of operation) of ITFS programming each week for each channel licensed to it, as it is today under the current rules. An ITFS licensee engaged in channel loading, however, will be permitted to load the ITFS programming satisfying this requirement on less than all of the channels for which it is licensed.<sup>19/</sup> Under the terms of this compromise, the

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<sup>18/</sup> In other words, a licensee of four channels engaged in channel loading will be required to maintain the right to use or recapture some simultaneous use of four channels.

<sup>19/</sup> For example, the licensee of a four channel ITFS facility would still be required to transmit eighty hours a week of ITFS programming (forty-eight hours during the first two years), but could meet that obligation by scheduling that programming for transmission over one, two, three or all four of its channels.

minimum programming requirement (*i.e.* hours 1-20) must be met by transmissions on one or more of the channels licensed to the ITFS licensee.

The key to the compromise is its provision regarding the scheduling of mandatory ready recapture time (*i.e.* hours 21-40). As noted above, an ITFS licensee engaged in channel loading will be required to preserve the right to recapture simultaneous transmission capacity on the number of channels for which it is licensed. However, the parties to the compromise recognize that coordinated, system-wide scheduling of recapture time can achieve significant benefits for both the educator and the wireless cable operator by maximizing the number of channels devoted to full time educational or commercial use. Under the terms of the compromise, ITFS licensees that choose to do so may agree to the transmission of programming over any MDS or ITFS channel in the system satisfying the minimum recapture requirements. This will provide the local educators sufficient flexibility to carefully coordinate their programming schedules as part of a system, to minimize the interspersing of educational and commercial programming, and to provide their wireless cable partner with the maximum number of full time commercial programming channels (thus obviating the need for channel mapping technology). Yet it still preserves the ability of the

ITFS licensee to transmit multiple programs simultaneously.<sup>20/</sup> Again, system-wide scheduling of recapture time is the key provision of the compromise.

**III. The Commission Must Assure That ITFS Licensees That Take Advantage Of The Opportunities Presented By Channel Loading And System-Wide Scheduling Are In No Way, Shape Or Form Jeopardizing Their Authorizations.**

The compromise also addresses one issue on which both educational and wireless cable interests are in complete agreement -- the Commission must make absolutely certain that those ITFS licensees that comport with whatever rules the Commission ultimately adopts to implement channel loading are not adversely impacted in the future as a result. The compromise calls for the Commission to declare that leasing and scheduling by ITFS applicants/licensees consistent with the other provisions of the compromise will establish that the applicant/licensee needs its channel capacity and entitle the applicant/licensee to an initial or renewed license. No demerit for channel loading or system-wide scheduling will be

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<sup>20/</sup> The workings of the compromise can best be explained by example. Assume that : (a) the licensee of the A Group channels is a local school board that utilizes all four of its channels from 8 am to 4 pm Monday through Friday, and has leased the remainder of its time to the local wireless cable operator; and (b) that the licensee of the B Group channels is a community college that engages in channel loading by putting eighty hours of ITFS programming per week on channel B1 between 7 am and 7 pm, and has reserved the right to recapture simultaneous use of three additional channels from 4 pm to 7 pm. Under system-wide scheduling, the community college could (but is not required to) agree in its excess capacity lease that should it exercise its recapture rights to the 4-7 pm airtime, the wireless cable operator can satisfy that requirement by transmitting the programming over three A Group channels. The benefits of this approach are obvious. The community college preserves its ability to recapture simultaneous use of four channels. The amount of educational programming interspersed with commercial programming is reduced, to the benefit of both the local school board and the community college. Meanwhile, the wireless cable operator can preserve full time commercial use of channels B2, B3 and B4.

imposed under the Commission's system for selecting from among mutually-exclusive applicants, nor will channel loading or system-wide scheduling have adverse consequences for a renewal application. Similarly, the compromise calls for the Commission to declare that leasing and scheduling by ITFS applicants/licensees consistent with the compromise will not serve as a basis for future efforts to seek reallocation of non-loaded ITFS spectrum for commercial use, and the parties to the compromise have agreed not to seek any such reallocation.

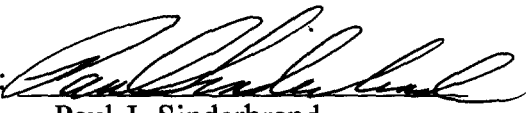
#### **IV. Conclusion.**

In sum, it is evident that Sections 74.931(a) and 74.931(e) of the Commission's Rules are inconsistent with the Commission's efforts both to increase the productive use of the ITFS and to promote wireless cable as a viable competitor to cable. Now is the time for the Commission to eliminate the need for costly channel mapping technology on an interim basis until digital compression becomes practicable. By adopting the industry-wide compromise presented herein, the Commission will not only be lowering the costs imposed

on educators and wireless cable operators, it will also be setting the stage for the introduction of digital technology to the ITFS and the wireless cable industry.

Respectfully submitted,

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August 19, 1993

## COMPROMISE ON CHANNEL LOADING

Pending the technical and economic viability of digital compression technology, the Commission will permit channel loading and system-wide scheduling on the following basis:

1. Each ITFS licensee will be required to preserve for immediate use or ready recapture at least forty hours per week per licensed channel for the transmission of ITFS programming (including the right to recapture simultaneous use of airtime on the number of the channels for which it is licensed). These rights cannot be abridged by contract and any contracts that do so are superseded. There will be no reduction whatsoever in the amount of mandatory ITFS programming from the current rules.
2. Each ITFS licensee will be required to actually transmit at least twenty hours (twelve hours for the first two years of operation) of ITFS programming each week for each channel licensed to it. Each ITFS licensee will be permitted to load programming satisfying this requirement on less than all of the channels for which it is licensed. The minimum programming requirement (*i.e.* hours 1-20) must be met by transmissions on the channel(s) licensed to the ITFS licensee.
3. In order to promote realization of the benefits of system-wide planning of program schedules, ITFS licensees that choose to do so may agree to the transmission over any MDS or ITFS channel in the system programming satisfying the minimum recapture requirements (*i.e.* hours 21-40). By carefully coordinating their programming schedules as part of a system, the ITFS licensees in an area could create full time educational channels and provide their wireless cable partner with the maximum number of full time commercial programming channels (thus obviating the need for channel mapping technology), while still preserving the ability of the ITFS licensees to transmit multiple programs simultaneously.
4. Leasing and scheduling by ITFS applicants/licensees consistent with the above will establish that the applicant/licensee needs its channel capacity and entitle the applicant/licensee to an initial or renewed license. No demerit for channel loading or system-wide scheduling will be imposed under the Commission's system for selecting from among mutually-exclusive applicants, nor will channel loading or system-wide scheduling have adverse consequences for a renewal application.
5. Similarly, leasing and scheduling by ITFS applicants/licensees consistent with the above will not serve as a basis for future efforts to seek reallocation of non-loaded ITFS spectrum for commercial use, and the parties to the compromise agree not to seek any such reallocation.